

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Currently Amended) ~~A~~In a device for opening and closing injection nozzles in an injection moulding tool, wherein the injection nozzle comprises a nozzle member, the nozzle opening of which can be opened and closed with a needle, wherein the needle is stationarily arranged on a piston plate that is supported in a receptacle such that it can be moved in both axial directions similar to a double-action cylinder, wherein a first work chamber is formed on the side of the piston plate which faces away from the needle and a second work chamber that can be acted upon with a fluid in order to actuate the needle is formed on the opposite side of the piston plate, and wherein the needle extends outward from the second work chamber through a recess in an end element that lies opposite of the piston plate, ~~characterized in that~~ the improvement wherein the second work chamber ~~(19)~~ is sealed in an essentially fluid-tight fashion by means of a first sealing element ~~(22, 37)~~ that is arranged between the inner wall of the receptacle ~~(12)~~ and the piston plate ~~(17, 34, 35)~~ and a second sealing element ~~(32)~~ that is arranged between the wall of the recess ~~(31)~~ and the needle ~~(25)~~ and comes in direct contact with the needle ~~(25)~~.

2. (Currently Amended) The device according to Claim 1, ~~characterized in that~~ wherein it comprises a base plate ~~(13)~~, an end plate ~~(15)~~ and a cylinder plate ~~(11)~~ that is arranged between the base plate ~~(13)~~ and the end plate ~~(15)~~, wherein the receptacle for the piston plate ~~(17, 34, 35)~~ is arranged in the cylinder plate ~~(11)~~, wherein the base plate ~~(13)~~ seals the receptacle ~~(12)~~ and forms the first work chamber ~~(18)~~, and wherein the end plate ~~(15)~~ seals the receptacle ~~(12)~~ and forms the second work chamber ~~(19)~~.

3. (Currently Amended) The device according to Claim 2, ~~characterized in that~~wherein an essentially closed peripheral sealing element ~~(22, 37)~~ is arranged around the receptacle ~~(12)~~ between the base plate ~~(13)~~ and the cylinder plate ~~(11)~~.

4. (Currently Amended) The device according to Claim 2, ~~characterized in that~~wherein the base plate ~~(13)~~ contains a line ~~(23)~~ that serves for the inflow and the outflow of the fluid and ends in the receptacle ~~(12)~~.

5. (Currently Amended) The device according to Claim 2, ~~characterized in that~~wherein an essentially closed peripheral sealing element ~~(32)~~ is arranged around the receptacle ~~(12)~~ between the cylinder plate ~~(11)~~ and the end plate ~~(15)~~.

6. (Currently Amended) The device according to Claim 2, ~~characterized in that~~wherein the end plate ~~(15)~~ contains a line ~~(24)~~ that serves for the inflow and the outflow of the fluid and ends in the receptacle ~~(12)~~.

7. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein the piston plate ~~(17, 34, 35)~~ essentially has the shape of a circular disk, and in that the recess ~~(12)~~ is realized complementary thereto in the form of a regular cylinder.

8. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein the piston plate ~~(17, 34, 35)~~ is provided with an essentially closed peripheral recess ~~(21)~~ in the region of its outer circumferential surface, wherein the first sealing element ~~(22, 37)~~ is arranged in this recess.

9. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein the first sealing element ~~(22, 37)~~ is realized in the form of an O-ring or an annular lip seal.

10. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein the second sealing element ~~(32)~~ is realized in the form of an O-ring or an annular lip seal.

11. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein a guide element ~~(38)~~ for guiding the needle ~~(25)~~ is arranged in the recess ~~(31)~~ of the end element or the end plate ~~(15)~~ in addition to the second sealing element ~~(32)~~.

12. (Currently Amended) The device according to Claim 11, ~~characterized in that~~wherein the guide element ~~(38)~~ is realized in the form of, in particular, a bushing-shaped radial sliding bearing.

13. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein a fixing element ~~(33)~~ is provided for fixing the second sealing element ~~(32)~~ and/or the guide element ~~(38)~~, in particular, under a prestress.

14. (Currently Amended) The device according to Claim 13, ~~characterized in that~~wherein the fixing element ~~(33)~~ can be screwed into the recess ~~(31)~~ similar to a stud screw and contains an axially continuous recess, through which the needle ~~(25)~~ extends with at least slight radial play.

15. (Currently Amended) The device according to Claim 1, ~~characterized in that~~wherein at least two needles ~~(25)~~ are arranged on a piston plate ~~(17, 34, 35)~~.